



PARTNERSHIPS FOR INNOVATION

# **Accelerating Innovation Research- Research Alliance**

**PFI:AIR-TRA**

**(Solicitation: *NSF 13-591*)**

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# Welcome and Introduction

- Website for this webinar and more information about PFI:AIR-RA program

<http://www.nsf.gov/eng/iip/pfi/air-ra.jsp>

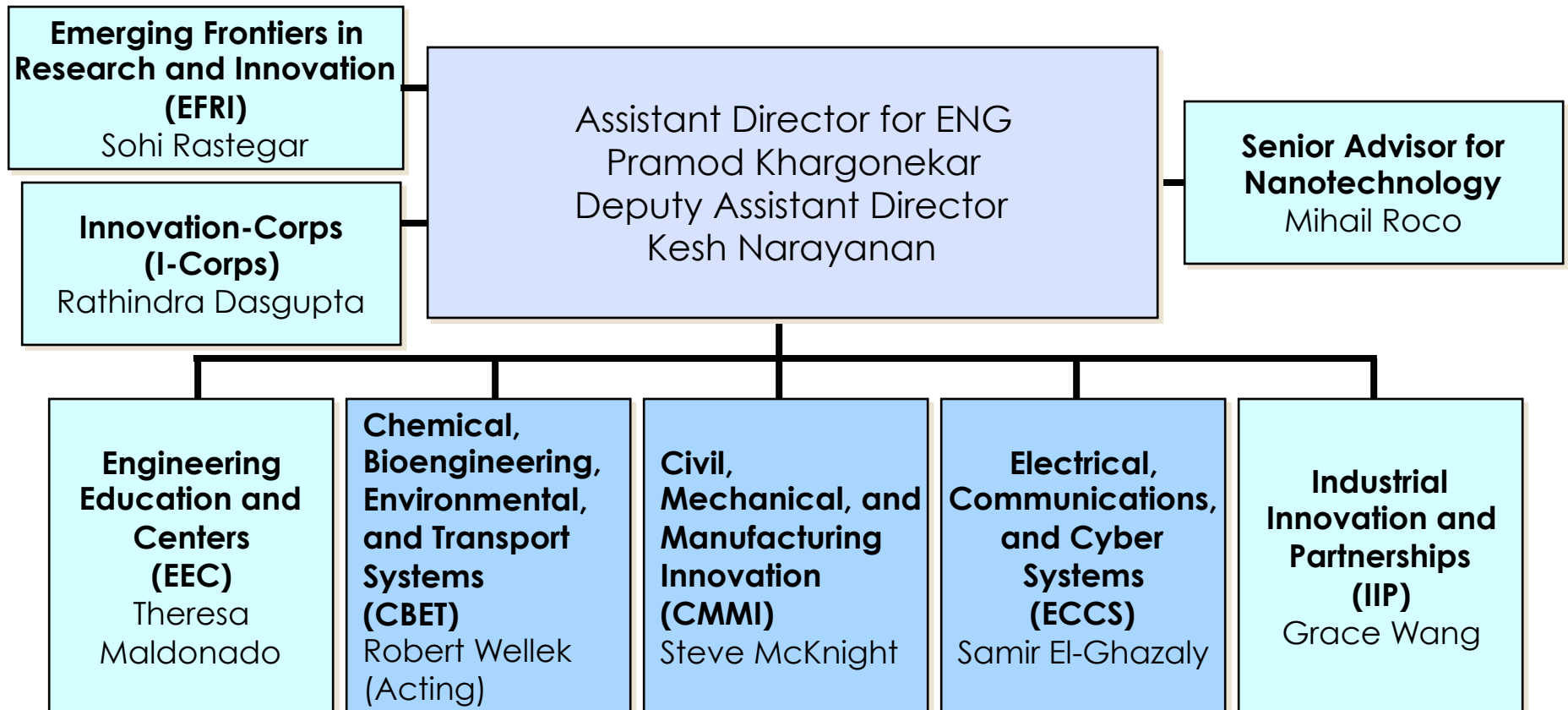
- Website for PFI:AIR-RA Solicitation, NSF 13-591:

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=504973](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504973)

Questions? [bkenny@nsf.gov](mailto:bkenny@nsf.gov)

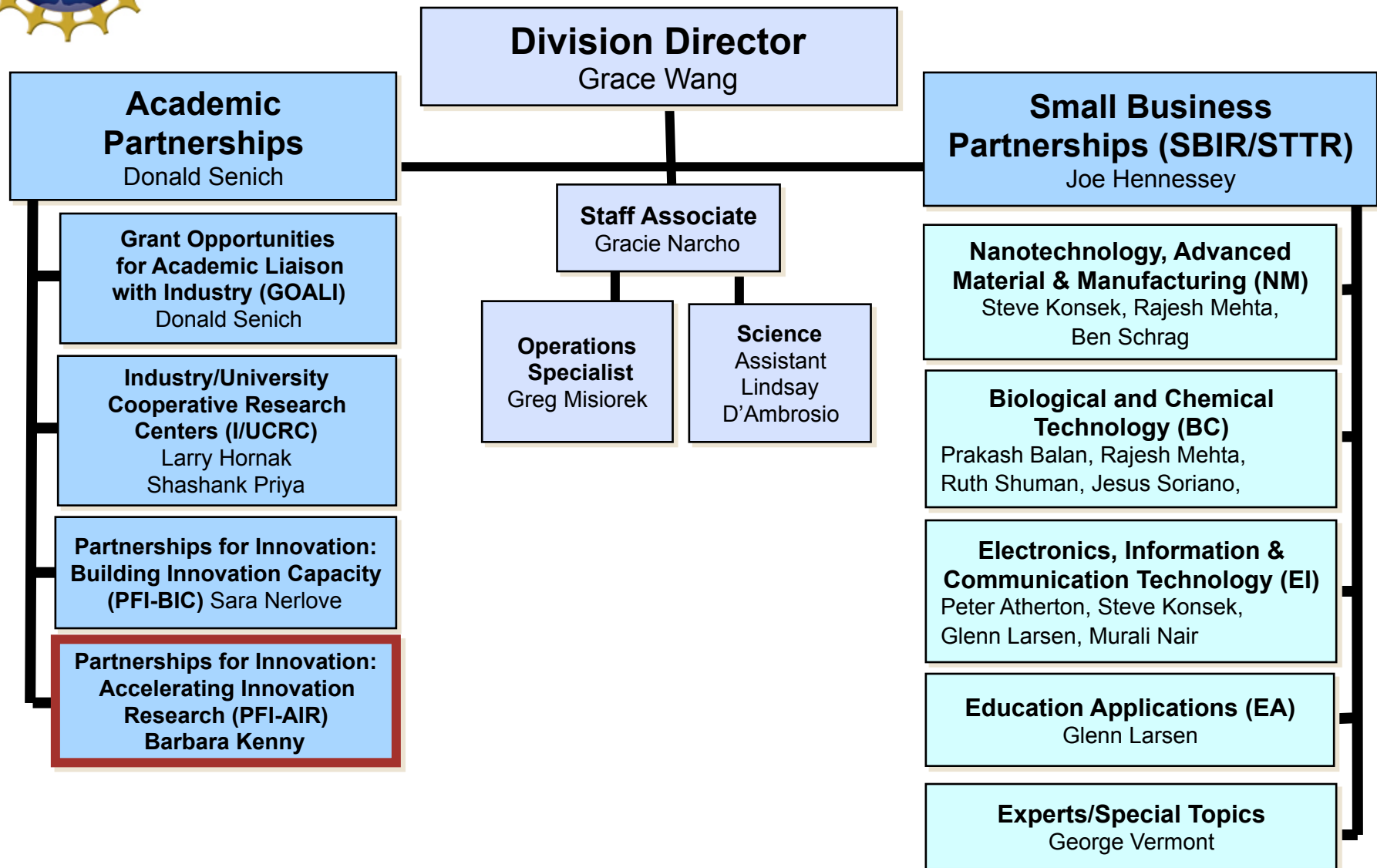


# Directorate of Engineering





# Industrial Innovation and Partnerships(IIP)





## *Big Picture: From NSF Strategic Plan*

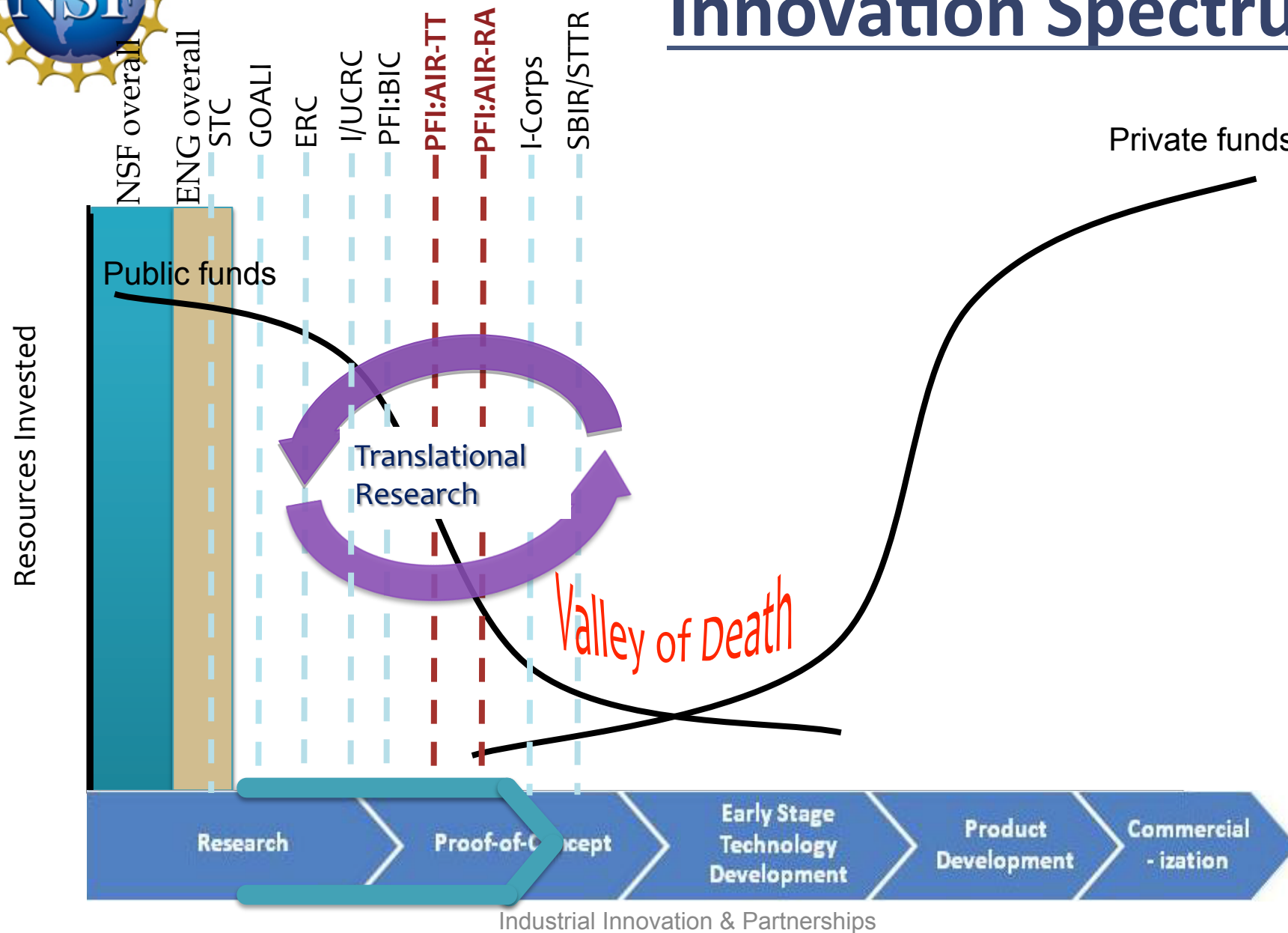
- ▶ “NSF must maintain an emphasis on funding fundamental, merit-reviewed research ...”
  - Core investment in basic science and research
  - Support discovery that enables innovation—discovery *for* innovation
- “...NSF is committed to creating connections between research produced through our investments and the needs of society.”
  - Investment in translational research
  - Support translation of discovery to innovation to realize commercialization—discovery *to* innovation



Industrial Innovation & Partnerships



# Innovation Spectrum



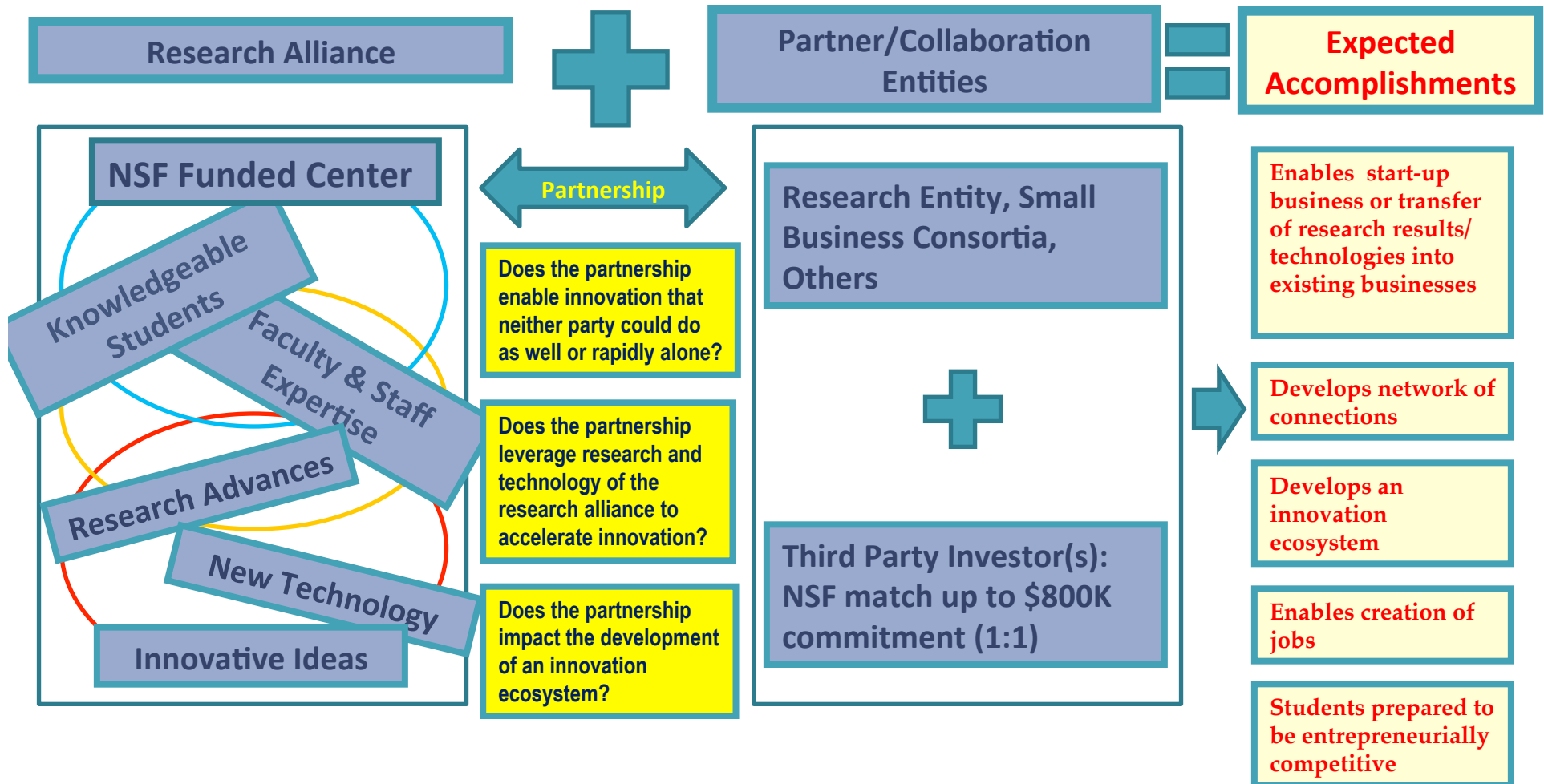


## ***AIR Research Alliance Goals***

- Accelerate the *translation and transfer* of research discoveries into innovative technologies and commercial realities through synergistic relationships formed between an existing NSF-funded research alliance, at least one other research partner entity, and at least one third-party investor.
- Promote the development of, or an extension of, an academic-based innovation ecosystem around an NSF-funded Research Alliance
- Enhance the knowledge and practice of innovation in faculty and students.



# Accelerating Innovation Research- Research Alliance







## ***Key Facts: NSF 13-591***

- One submission period in FY14

LOI required	Full proposal
Dec. 13, 2013	Feb 12, 2014

- PI must be faculty member active within an NSF-funded Research Alliance (RA)
  - PI may submit only one proposal to PFI:AIR-RA, or PFI:AIR-TT, or PFI:BIC during a given fiscal year.
- Work proposed must leverage core mission of RA
- At least one 3<sup>rd</sup> party investor required
  - 1:1 match, up to 25% can be “in-kind”
- At least one Research Partner required (co-PI or senior personnel)
  - No collaborative proposals



## ***NSF-Funded Research Alliance***

- What is it?
  - A research partnership between/amongst universities and other entities funded by the NSF
- Examples
  - NSF Research Centers such as I/UCRCs, ERCs, STCs, etc.
  - NSF funded multi-year, multi-institution research grants such as Emerging Frontiers in Research Innovation (EFRI).
- Time horizon
  - Currently funded
  - Graduated within three years of LOI due date but still operating as Research Alliance/Center



## ***Funding***

- Maximum award size: \$800,000
  - Requires 1:1 Third Party Match,
    - Minimum 75% cash, up to 25% “in-kind.”
- Examples:

3 <sup>rd</sup> Party Cash Investment	3 <sup>rd</sup> Party In-Kind Investment	Maximum NSF Funds
\$300,000	\$50,000	\$350,000
\$300,000	\$100,000	\$400,000
\$300,000	\$200,000	\$400,000
\$750,000	\$50,000	\$800,000
\$1,000,000	\$0	\$800,000



## *Timing*

- Award duration up to 3 years
- Mid-term review at NSF at 18 months
  - PI, Research Partner, 3<sup>rd</sup> Party Investor
  - Review of progress against proposed plans and milestones; evidence of developing innovation ecosystem
- Evidence of committed 3<sup>rd</sup> party investment is required at time of proposal submission
- At least 60% of 3<sup>rd</sup> party investment must be in place prior to award
  - Remaining 40% must be in place prior to start of Year 3
- 70% of NSF funding available at time of award
  - Remaining 30% contingent on successful mid-term review



## ***Project Narrative (1)***

- Description of the technology(ies) to be translated and/or transferred.
  - Discuss the targeted market space and the potential for competitive advantage
- NSF Lineage
  - Describe how the project work derives from the core mission of the underlying research alliance (include RA award number).
- Research Plan
  - Include milestones with specific objectives, tasks and expected outputs (e.g. early stage prototype, fully functioning prototype)
  - Describe a strategy or plan toward commercialization
- Role of Research Partner
  - Describe how the research partnership(s) enables competitive innovation that neither party could do as well or rapidly alone



***See Solicitation for full details***

## ***Project Narrative (2)***

- Role of 3<sup>rd</sup> Party Investor(s).
  - Discuss how the collaboration with 3<sup>rd</sup> party investor(s) will enable the accelerated transfer of innovative technologies from academia to commercial realities.
- Development/Enhancement of Innovation Ecosystem
  - Describe how the the proposed research partnership(s) and 3<sup>rd</sup> party collaboration(s) will contribute to a sustainable academic-based innovation ecosystem.
- Assessment Plan
  - Describe metrics and approach to gauge success of partnerships and collaborations.
- Education Plan
  - Describe how participating students will learn about innovation and entrepreneurship.



## *Supplemental Documents*

- 3<sup>rd</sup> Party Investor(s) Letters of Commitment
  - Due with proposal
  - Specify timing, total investment, and nature of commitment
- Allocation of Funding Table
  - Show how NSF funding will be allocated across proposed *tasks or efforts* each year.
- Letter of Cooperative Research Agreement (CRA)
  - State that CRA will be negotiated with partners and 3<sup>rd</sup> party investors and provided to NSF if award is recommended
- If PI is **not** the PI (e.g. Director) of the RA...
  - Letter of support from the PI of the RA is required
  - Letter must describe how proposed work leverages core mission of RA



## ***If Research Alliance is Post-NSF Support (within 3 years)...***

- Supplemental Documents must include evidence that RA is still in good standing
  - Table with list of grants received by Research Alliance
    - Include PI/co-PI, funding type, source, and amount, grant duration and date of award
  - Number and type of students (e.g. MS or PhD) funded by RA and graduated post-NSF support
  - Statement by RA Director describing type of ongoing partnerships and research/education/commercial activities that comprise the RA
    - Must be co-signed by a reporting Research Administrator





## ***Additional Review Criteria***

- Quality and effectiveness of proposed plans
  - Research plans, proposed tasks and milestones, commercialization plans, partnership and collaboration plans
- Quality and appropriateness of research partnership(s)
- Quality of proposed deliverables
- Commitment of 3<sup>rd</sup> party investors
- Effectiveness of proposed partnerships, 3<sup>rd</sup> party investors and strategic plans in catalyzing or enhancing sustainable innovation ecosystem
  - Effectiveness of proposed metrics and assessment plan
- Net added value to students
- If post-NSF support, strength of evidence the RA is still functioning as a research partnership



Thank you for your interest in PFI:AIR-Technology Translation NSF 13-591.

Copy of the webinar can be found at

<http://www.nsf.gov/eng/iip/pfi/air-ra.jsp>

Additional questions, please contact Barbara Kenny [bkenny@nsf.gov](mailto:bkenny@nsf.gov)

# QUESTIONS?